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Field Season Offers Each of Us Many Opportunities To Marvel Over Our Unique Natural Treasures

June is upon us and that steady uptick of activity we've been witnessing goes into even higher gear with families looking at places to visit together while their kids are enjoying their summer vacation from school and discovering the wonders of the public lands we work so hard to maintain year round.

I've had the pleasure of the first of what I hope to be many "field season" visits to our offices to see the work each of you do, first hand. And I encourage each of you to spend some of your free time getting out to see and marvel at the many havens that are Service lands from a customer perspective as well. We are truly blessed with an amazing resource that we maintain and a talented and dedicated staff of people who work daily to care for these natural treasures.

Safety remains vitally important to our success during this adventurous and active season, as well. I simply remind each of you to exercise good judgment as you enjoy recreational activities that carry risks if we're complacent, be it boating, barbecuing or more. That also extends to using your safety awareness skills when taking care of seemingly routine outdoor activities as the temperatures soar. Simple steps like defending yourself from heat stroke risks with plenty of hydration and proper sun protection could be all the difference in the world.

This month I've also been invigorated by our next steps in the surrogate species arena. It's fantastic to see our surrogate species work continue moving forward as we will host a meeting with our State partners later this month to learn from their perspectives as we draft our plans. This peer-to-peer input is crucial as we collectively define what surrogate species means and take that knowledge to develop planning documents and determine what is the most efficient work for us to do as an agency, especially in challenging financial times.

My recent travels have also given me the chance to enjoy a few of this region's many kids fishing day events as well as to get a closer look at the tiniest of our region's endangered

species, the Iowa Pleistocene snail. I hope you all find some time to get out and see some of the greatness in our region as well. We can boast of many things here in the Midwest Region, including one of the smallest endangered species, the smallest national wildlife refuge and we can be most proud of our team of Service staff with their big hearts and big responsibilities in caring for our unique wildlife and habitats.

Enjoy this month's issue of Inside Region 3!

Tom Melius Regional Director, Midwest Region



On the Cover

Native prairie grasses dwindle in North Dakota as grasslands are converted to cropland. Photo courtesy of Jim Ringelman, Ducks Unlimited

Inside Region 3

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Federal Wildlife Canine Helps Law Enforcement Team Close Poaching Case

By Tina Shaw External Affairs

law enforcement Our officers work every day to uphold conservation laws, permits and regulations on refuge lands across the Midwest. Sure, you may know that they use GPS technology, surveillance and other high-tech tools to get the job done, but did you know that they another have highly sophisticated tool? Dogs!

National wildlife refuges have been using trained federal wildlife canines for more than 20 years across the country for everything from search and rescue to finding and retrieving hidden game. Our most recent canine success story comes from the law enforcement team at Crab Orchard National Wildlife Refuge in Illinois.

Last fall, Federal Wildlife Officer Dustin Schelling of Crab Orchard National Wildlife Refuge noticed evidence of baiting and what looked to be a poaching operation for harvesting whitetail deer in an area of the refuge that is closed to hunting.

Hunting over bait, using screw in steps for a tree stand, and leaving a tree stand in overnight are all violations of federal hunting regulations and Schelling set out to put a stop to this illegal activity on refuge lands. In addition to the tree stand and equipment found onsite, there was extensive damage done to create the illegal hunting holes, including cutting and removing vegetation.

While he had a great amount of evidence, Schelling was having difficulty finding one of the poaching locations. To better build his case and, ultimately bring the poacher to justice, Schelling called upon Federal Wildlife Canine Officer Adam Rawlinson and his canine partner Nate to work the case.

Crab Orchard National Wildlife Refuge Manager Kathleen Burchett was pleased with the strong team effort on this case. "Officer Schelling's patience, tenacity, and



Meet "Nate," a member of the Crab Orchard law enforcement team. Dustin Schelling, USFWS

effective utilization of all available resources of our exemplary refuge law enforcement team, including Canine Officer Nate, brought another poacher to justice," she said.

Federal wildlife canines are trained to use their keen sense of smell for all sorts of wildlife-related needs. In this case, Nate is trained to track human scent and was able to track the poacher's path from his vehicle to a baited tree stand nearly a half-mile into the woods. This was a central element in closing the case.

Patience, observation and teamwork made this successful case possible and, with the support of Refuge Zone Officer Geoff Donaldson and the Assistant U.S. Attorney George Norwood, the poacher was sentenced to two-years probation for each of the charges, with all terms to run concurrently.

"This is significant in that it sends an important message to those that might consider abusing the privilege of hunting public lands and helps protect legal hunting opportunities

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Crab Orchard NWR Federal Wildlife Officer Dustin Schelling interviews a hunter after a team confirmed poaching at the refuge. Geoff Donaldson, USFWS.

for ethical hunters," noted Crab Orchard National Wildlife Refuge Deputy Manager Kevin Sloan.

A further condition of the sentencing is that during the term of probation, the poacher is losing the privilege of hunting on any public lands and has been fined \$1,450 for his illegal activity.

Learn more about how canines are used in conservation work: http://www.dec.ny.gov/ regulations/2775.html

Find out more about the case and sentencing: http://www.justice.gov/usao/ils/News/2013/Apr/04152013_Scherer%20Press%20Release.html



 $By \ Joseph \ Gerbyshak \\ Alpena \ FWCO$

For the past two field seasons, biologists from the Alpena Fish and Wildlife Conservation Office (FWCO) have used a game camera to monitor habitat improvement projects. Using the game camera to take daily images from a fixed location has proven useful for documenting project progression and capturing ecological responses to restoration actions over time.

The game camera also has GPS transmission capabilities, allowing biologists and interested partners to view daily photos from their desktop and to remotely monitor the status of the project in real time. This allows biologists

to oversee the development of a project, alerts them to complications, and helps them to determine when a site visit is warranted, saving countless trips to the project site by both biologists and interested partners. This is a time saving feature since most of the aquatic habitat restoration projects the station is involved with are located a long distance from the office.

Once the project is complete, the daily images can be easily made into a slide show or time-lapsed video with free software available online, resulting in a concise synopsis of the project activities.

Throughout the 2013 field season the camera will be used to monitor the installation of a rock ramp (designed for fish passage) at the Frankenmuth Dam on the Cass River. The game camera is an ideal tool for monitoring this project because the construction will take place over several weeks and is located a great distance from the field office.

Over the 2012 field season, the game camera was used to remotely monitor a culvert removal and bridge replacement project on the Black River, in Alcona County, MI. Biologists and project partners were able to monitor project status and document removal of an undersized culvert and the assembly of a new timber bridge.

During the 2011 field (continued next page)



Impoundment on Miller Creek before the dam removal.



Removal of the remaining dam structure and installation of a new, bottomless culvert.



Formation of the new channel. USFWS



Revegetation of the former impoundment.

season, the game camera was used to document a small dam removal on Miller Creek, a coldwater tributary to the Thunder Bay River in northeast Michigan. The documented camera dewatering the and of the re-vegetation impoundment, channel formation, dam removal, and installation of a fish friendly culvert.

One unanticipated benefit of the game camera was that it captured many different species of wildlife using the former impoundment and newly formed riparian zone.

Midwest Artist Wins National Endangered Species Day Youth Art Contest

Grand Prize Winner is Kindergartener from St. Louis

By Georgia Parham External Affairs

For the second year in a row, a young artist from the Midwest has taken top honors in the national Endangered Species Day Youth Art The Contest. Grand Prize was awarded to Ava Bribiesco, a kindergartener attending the International Schoolhouse in St. Louis, Ava's artwork Missouri. depicted the endangered American burying beetle, a bright orange insect that is native to Missouri.

Ava was honored at the Association of Zoos and Aquariums' Congressional Reception in Washington, D.C., on May 22, 2013, and had her name engraved on a special trophy. In addition, she receives an art lesson from reknowned marine artist "Wyland," a plaque and art supplies. Other first place category winners received a plaque and art supplies.

Asked about her choice for her artwork, Ava explained, "I love bugs and I thought the orange on its antennas



were beautiful. I love all animals and it makes me sad that some are endangered. I hope we can protect them so they can survive."

Ava's win comes a year after another Midwestern artist, Sky Waters from Eagan, Minnesota, was awarded grand prize. American burying beetles were listed as endangered in 1989 – the first insect species to be so recognized. In 2012, American burying beetles were reintroduced in Missouri, the first reintroduction of an endangered species in Missouri.

The Service, the Endangered Species Coalition, the Association of Zoos and Aquariums and the International Child Art Foundation announced the winners of the contest, an integral part of the 8th annual national Endangered Species Day, celebrated on May 17, 2013.

In addition to Ava, 40 semifinalists were chosen by the International Child Art Foundation and their artwork can be viewed on a special online gallery at: http://www.stopextinction.org/esd/434-2013-art.html.

The winners were chosen by a panel of artists, photographers, scientists and conservationists including Wyland, the marine artist: Jack Hanna, host of Jack Hanna's Into the Wild; David Littschwager, a freelance photographer and regular contributor to National Geographic Magazine; Susan Middletown, a photographer who has collaborated with Littschwager and whose own work has been published in four books; Tangerini, Alice and botanical illustrator for the Smithsonian Institution.

Started in 2006 by the United States Senate, Endangered Species Day is a celebration of our nation's imperiled plants and wildlife and wild places, with an emphasis on success stories of species recovery.

Plains & Prairie Potholes LCC

Leveraging Investments in Grassland Conservation, Water Quality and Invasive Species Management Across Canada Border

By Ashley Spratt External Affairs

Alongside leading natural resources agencies and organizations in the United States and Canada, the Plains and Prairie Potholes Landscape Conservation Cooperative (LCC) is investing \$288,680 and leveraging more than \$4 million in partner funds to conserve and manage key natural resources across the northern Great Plains and prairie pothole region.

LCC partners recently announced funding for three stakeholder-driven research initiatives to benefit grassland conservation, water quality and invasive species management.

Carbon sequestration research to benefit grassland conservation in the northern Great Plains

The LCC will provide \$153,300 in 2013 funding to carbon sequestration research as part of a new pilot grassland conservation program to protect at-risk grasslands from conversion to cropland in the northern Great Plains.

Natural resources partners have leveraged more than \$3 million in private and federal funding to support an innovative program that extends protection of privately-owned grasslands that have expired under the Conservation Reserve Program (CRP). In the past two years alone, the number of CRP acres nationally has dropped from 31.2 million to 27 million. Of the 4.2-million-acredecline, lands lost in North Dakota and Montana accounted for 1.6 million acres, or 38 percent.

The program encourages private landowners to conserve CRP grasslands through the financial incentives of carbon credits.

"Keeping grass on the landscape via the Conservation Reserve Program is an important tool for conservation of fish, wildlife, soil and water resources of the Northern Great Plains," said LCC coordinator Rick Nelson. "Working side-by-side with private landowners, natural resources agencies and organizations are looking for ways to enhance agricultural profitability and maintain important habitats for fish, wildlife and plants."



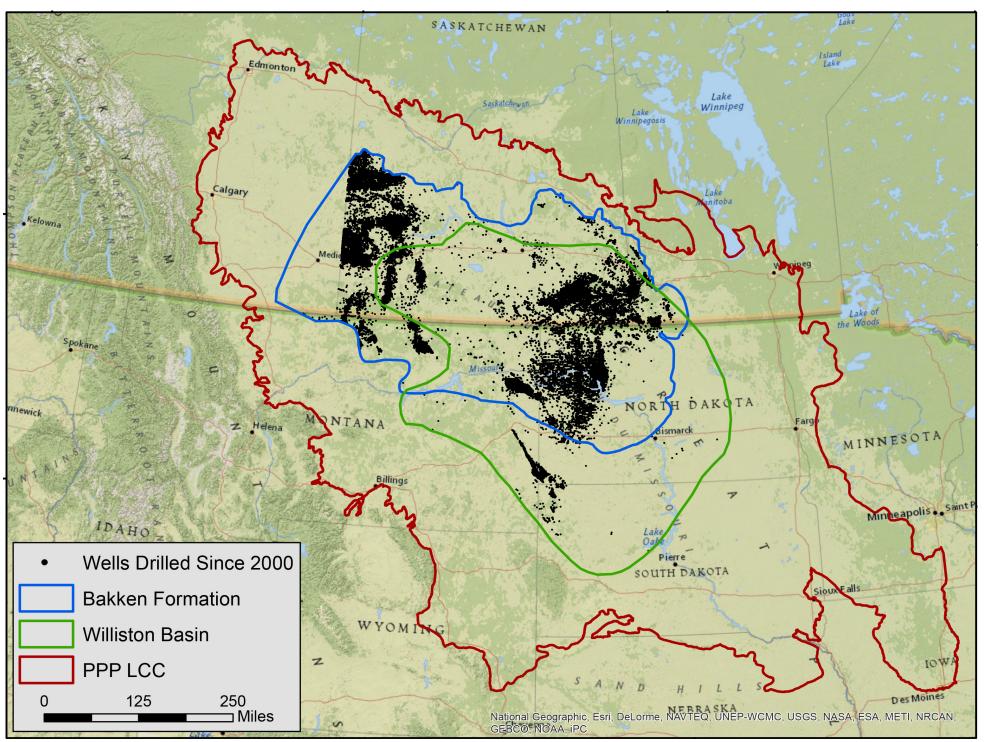
Fall foliage along the Souris River in the J. Clark Salyer National Wildlife Refuge, North Dakota. USFWS

With the support of LCC funding, LCC partners Ducks Unlimited and the Agricultural Research Service's Northern Great Plains Research Lab will conduct soil carbon measurements on expired CRP lands before and after installation of livestock fencing and other infrastructure benefiting grassland conservation.

"Many landowners and agricultural producers in the northern Great Plains are interested in retaining their expired CRP as grasslands, yet have few economically competitive Ducks Unlimited and its partners look forward to further piloting a working lands transition program tha combines payments from grassland carbon offsets with other investments in grass-based agriculture," said Randal Dell, lead project investigator and economist with Ducks Unlimited.

"These combined revenue streams can help provide a more economically competitive incentive to maintain grasslands for wildlife, livestock and people," Dell said.

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This map outlines the geography associated with the Plains and Prairie Pothole LCC, Williston Basin, Bakken Formation, and all petroleum related wells drilled since 2000. USFWS graphic

Targeting wetland restoration and conservation to improve water quality while maximizing agricultural production in the Souris River watershed

The LCC will provide \$74,400 in 2013 funding to support research targeting wetland restoration and conservation efforts in nine sub-watersheds of the Souris River, which has experienced dramatic increases in nutrient concentration over time.

The Souris River watershed spans more than 23,000 square miles (61,000 square kilometers) across Saskatchewan, North Dakota and Manitoba.

"As a working landscape, wetland restoration and conservation efforts throughout the Souris River watershed must be targeted to maximize agricultural production and incentivize conservation on private lands while reducing water quality impacts," said LCC coordinator Rick Nelson.

The funding will support a cross-jurisdictional study led by Ducks Unlimited, Inc., Ducks Unlimited Canada, and Province of Manitoba *Page 10*

researchers that will combine current and historic wetland inventories and examine water quality trends across watersheds with varying levels of wetland cover.

"A coordinated approach to wetland restoration across a large prairie watershed is critical to finding the most effective balance between agricultural yield and ecological integrity," Nelson said.

Non-point source pollution from the Souris River watershed has been known to impact water quality throughout the watershed including the adjoining Assiniboine River and Lake Winnipeg.

"Algae blooms on Lake Winnipeg and many of our lakes and rivers are a symptom of increased nutrients. sediment from runoff upstream watersheds as a result of drainage," wetland said Badiou, Pascal research scientist with **Ducks** Unlimited Canada's Institute for Wetland and Waterfowl Research. "The results of this research will really help us target wetland protection and restoration efforts that will benefit our lakes, rivers and streams."

New study examines relationship between oil production and invasive plant species within the Williston Basin

The LCC will provide \$60,980 in 2013 funding to support research examining the relationship between the presence and abundance of invasive plant species, mainly noxious weeds and perennial forage grasses, and the location and age of oil well pads in native prairie environments.

Energy development across the northern plains of Montana and North Dakota is occurring at a rapid speed, while invasive species continue to challenge conservation practitioners' efforts to restore native prairie, grassland and wetland habitats.

"We don't fully understand how the rapid and large scale development of oil may be changing the rate at which invasive plants are spreading," said LCC coordinator Rick Nelson. "It's critical to stay ahead of the game by learning as much about these relationships as possible. As conservation stewards, we must arm ourselves with the necessary

science and research to guide our responses to environmental challenges today and in the future."

Led by researchers from the U.S. Geological Survey (USGS), this study will help resource managers understand how invasive plants are moving and the role of oil development in invasions. Research results will assist wildlife managers, private landowners and the oil industry in developing effective ways to reduce the spread of invasive plant species.

More than 46,000 new petroleum-related wells have been drilled in the Williston Basin and Bakken Formation since the first successful Bakken test well was drilled in 2000.

"An average well pad is typically five acres, which translates into 230,000 acres of soil disturbance. We have observed invasive plant species, including noxious weeds, on and around lands disturbed from recent energy development," said lead project investigator Todd Preston.

"We will examine if there is a pathway for noxious

weeds to become established in adjacent native prairie lands associated with well pad construction. This study will help the conservation community understand the interactions between recent energy development and the introduction and spread of invasive species across the plains and prairie pothole region."

For additional information on the mission, vision and activities of the Plains and Prairie Potholes LCC visit http://www.plainsandprairiepotholeslcc.org/.

Landscape Conservation Cooperatives (LCCs) address large scale natural resource challenges that transcend political and boundaries iurisdictional and require a networked approach to conservation holistic, collaborative, and grounded in science - to ensure the sustainability of America's land, water, wildlife and cultural resources. For more information about LCCs, visit http://www.fws. gov/landscape-conservation/ lcc.html/

Michigan Birder Leaves Legacy for Great Lakes Piping Plovers

By Tina Shaw External Affairs

Deputy Regional Director Charlie Wooley joined Seney National Wildlife Refuge staff, Friends and partners in marking the addition of lakeshore acreage to National Wildlife Senev Refuge, on April 27. The 19.85 acres of land known as the Helstrom Addition, commemorated honor of Michigan native John J. Helstrom and is within designated critical habitat for the endangered Great Lakes piping plover. A proponent of preserving the natural environment, Helstrom often remarked about the beauty of Whitefish Point and its importance to bird populations.

After a 25-year absence, piping plovers returned to the point in 2009 and successfully fledged young. Nesting has increased over the past three years and in 2012, four pairs fledged 11 chicks. Plovers have been observed using the newly acquired acres as recently as this spring. The signing of the deed in late August

signaled the end of an effort that began with the Service and partners meeting in Newberry, Mich. more than two years earlier.

"As we stay vigilant in our conservation work, one point stays true – growing the amount of undeveloped land is key to protecting migrating birds and returning sustainable populations of piping plovers to the Great Lakes," said Wooley.

Last fall, the U.S. Fish and Wildlife Service finalized the purchase of the land at

Whitefish Point in Chippewa County. Michigan. which includes acreage, 1,000-feet of Lake Superior shoreline, is adjacent to 33-acres that make up the Whitefish Point Unit of the Seney National Wildlife Refuge. The gravel beaches, sandy beach dunes and stunted jack-pine dominated forests, once slated for development. are now protected as part of the National Wildlife Refuge System.

"Returning plovers to the Great Lakes and protecting migratory birds means safeguarding our land. I couldn't be more proud to see this land added to the National Wildlife Refuge System," said Wooley.

Whitefish Point is renowned for its concentrations of birds during migration. Each year thousands of raptors, passerines and waterbirds funnel up to the point to cross Lake Superior. They are followed by hundreds of birders. The bird list for Whitefish Point includes 273 species and the point has been designated as a globally important bird area.

"We talk a lot about the importance of undisturbed habitats and restoration and how they help threatened and endangered animals, but one of the reasons that we are here today is because this place was important to one man, John Helstrom," noted Wooley.

Helstrom enjoyed spending

time outdoors and made many trips to the Upper Peninsula, both as a child with his family, and again as an adult. He was especially fond of Whitefish Point and the surrounding area.

The purchase of the land was made possible with funding through the Great Lakes Restoration Initiative, as well as a considerable amount of donated funds raised by the Whitefish Point Bird Observatory. The effort of the Service and our partners exemplifies our mission of working with others to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people.



This returning male piping plover made it to Saturday's event as well and successfully bred at Whitefish Point last year, fledging multiple chicks. Vince Cavalieri, USFWS

10th Annual Kids Fishing Day at Genoa NFH A Lunker of Success

By Katie Steiger-Meister External Affairs

Genoa National Fish Hatchery hosted 250 kids and parents for the 10th Annual Kids Fishing Day Event, May 18. The event was co-sponsored by the La Crosse area offices of the U.S. Fish and Wildlife Service and the Friends of the Upper Mississippi.

The kids, ranging in ages from 6-12 years old, began their day by rotating through each of the four learning stations to help add a wealth of fishing knowledge to the

mix before they dropped a line with a shot at catching one of the 2,500 rainbow trout from the hatchery pond, where they would find fish sizes ranging from 10- to 14-inches.

U.S. Fish and Wildlife Service Regional Director Tom Melius attended the event and noted, "There's really nothing that matches the joy of seeing the smiles and excitement of these young kids, some of whom might be catching their first fish at this event. Today's event was no exception and hopefully many have now

added that positive lifelong memory of fishing and enjoying the beauty of the outdoors we work so hard to conserve, enhance and protect."

In addition to the main event, trying to land a those attending lunker, learned useful skills from the many volunteers staffing the learning stations. The learning stations included discussion of fishing ethics conservation. fish behavior and habitats, lure and jig tying, and the popular fish anatomy station where they could see how fish are carved into the fillets they can cook and eat.

Hatchery Manager Doug Aloisi, said, "This 10th Annual Fishing Day Event was yet another success thanks to the volunteers and staff who help make it happen. They included the Friends of the Upper Mississippi, the La Crosse Fish Health Center, La Crosse National Fish and Wildlife Conservation Office and Genoa National Fish Hatchery."



Regional Director Tom Melius joins a couple of the participants in the Fishing Day festivities at Genoa NFH to display their catches, one of which was the Catch of the Day for the entire event. USFWS

Center was founded in 1962, and serves the entire Midwest Region, providing fish health screening and wild fish health surveys on selected wild fish populations. The La Crosse National Fish and Wildlife Conservation Office, founded in 1995, conserves, enhances and protects aquatic ecosystems in Wisconsin, Minnesota. Iowa, and Illinois. The office also helps natural resource managers from state, tribal, and federal agencies, as

The La Crosse Fish Health

well as concerned citizens involved in achieving that mission.

The Genoa National Fish Hatchery has been in existence since 1932 with the creation of the Upper Mississippi River National Wildlife and Fish Refuge. Its mission is working with partners to restore and maintain fish and other aquatic resources for the benefit of the American public.



Regional Director Tom Melius and Jennifer Malphy display her son's catch at Genoa National Fish Hatchery, May 18. USFWS

Migrating Whooping Cranes Visit Restored Wetlands in Northern Illinois

By Aleshia Kenney and Kraig McPeek, Rock Island Ecological Services Field Office

Every spring, bird watchers are out in full force watching birds make their way to summer breeding grounds. Each viewer hopes to see something rare and mavbe...just mavbe...a new life list. Just such an occasion happened during the last weekend of March in northern Illinois, when a private landowner who had worked with the Partners for Fish and Wildlife Program to restore wetlands on his farm noticed a bunch of sandhill cranes and one endangered whooping crane using his restored wetland.

Inthe 1940s, only 16 who oping cranes remained in the wild; today there are around 600 birds. The whooping crane is endangered mainly as a result of habitat loss. As the country's agricultural landscape took shape, wetlands that whooping cranes depended on for food and reproduction drained to better were accommodate corn and sovbean production. Today there are many conservation efforts that focus on restoring wetlands back to the landscape.

Habitat restoration and enhancement in this area of northern Illinois has centered on wetland restoration and

enhancement of floodplain habitats, primarily restoring hydrology to relic oxbows. Partners for Fish and Wildlife biologists from the Rock Island Field Office began restoring wetlands in this area in the mid- to early-1990s, because of the vast opportunity for restoration. In 2009, Rock Island began using American Recovery and Reinvestment Act funds to further enhance wetland restoration efforts in the Pecatonica River watershed. From 2009 to 2012 these funds were used to restore and/or enhance over 300 acres of wetlands in the watershed.

Two decades of work has

paid off. Seeing whooping cranes feeding and loafing in a wetland that has been restored through the hard work of Service biologists and dedicated landowners is the "cat's meow," the "bee's knees," and the "pudding."

We often work in a vacuum; but we achieve every day. We do our jobs to the best of our abilities but are often overcome with the inbox and getting this out or that out, or simply responding to emails. We need to take moments like this to fully understand that this picture represents a tremendous amount of work and dedication from biologists all over the Midwest and throughout the country.

The whooping crane is a symbol of success and a source of inspiration that we could all use to better ourselves and our ability to press on and change the curve. It represents a common goal that is sought and achieved only through shared work of all our programs, local conservation entities and partners alike.

What starts as a chick at a national wildlife refuge in Wisconsin is transformed into a symbol of protection, restoration and enforcement of conservation and habitat across a vast landscape that has many threats.



 $This \ who oping \ crane \ was \ spotted \ among \ sandhill \ cranes \ in \ March \ at \ a \ site \ in \ Illinois \ restored \ by \ the \ Partners for Fish \ and \ Wildlife \ program. \ Harlan \ Tipton, \ USFWS \ and \ Wildlife \ program.$

Education Continues in the Battle Against Unintended Eagle Poisoning

By Tina Shaw External Affairs

The U.S. Fish and Wildlife Service Office of Law Enforcement, working together with the United States Attorney and Wisconsin Department Natural Resources. continues their education effort in support of wildlife as they fight the devastating effects of euthanasia drugs.

John W. Vaudreuil, United States Attorney for the Western District of Wisconsin, announced the successful completion the April 2012 agreement reached between the United States and Jennifer M. Primich, 37, of Phelps, Wisconsin, in connection with the accidental poisoning of bald eagles on April 9, 2011, at a landfill near Eagle River, Wis.

Pursuant to the pretrial diversion agreement, Primich agreed to complete 12 hours of community outreach at County Humane Societies, specifically addressing the secondary mortality effects of using euthanasia drugs.

Ms. Primich made presentations to the following 12 organizations:

- Oneida County Humane Society (formerly Rhinelander Animal Shelter, Rhinelander, WI)
- Lincoln County Humane Society, Merrill, WI
- Hope Animal Shelter, Ironwood, MI (also serving Iron County, WI)
- Forest County Humane Society, Crandon, WI
- Chequamagon Humane Association, Inc., Ashland, WI
- Rusk County Animal Shelter, Ladysmith, WI
- Taylor County Humane Society, Inc., Medford, WI
- Clark County Humane Society, Neillsville, WI
- Jackson County Animal Shelter, Black River Falls, WI
- Monroe County Animal Shelter, Sparta, WI
- Adams County Animal Shelter, Friendship, WI
- Catkins Animal Rescue, Inc., Park Falls, WI

"Historically, we have been working with our state and nonprofit partners in conservation for more than 20 years to avert tragedies like this," notes Office of Law Enforcement Resident Agent in Charge



Seven eagles were found at a Wisconsin landfill and it was determined they had all fed on euthanized house cats, vomited and were near death when rescued by Raptor Education Group, Inc. Photo courtesy of Raptor Education Group, Inc.

for Minnesota, Iowa, and Wisconsin Pat Lund.

"The best we can do is teach shelters, veterinary practitioners and pet owners...and stay vigilant," continues Lund.

United States Attorney Vaudreuil praised Ms. efforts stating, Primich's "The goals of this pretrial diversion agreement have been completely met. The dangers and risks from secondary mortality effects of euthanasia drugs have been described to many humane societies and shelters in the Western District of Wisconsin. I am confident that wildlife that might otherwise have been harmed is safer today."

Seven bald eagles were found comatose and near death near the landfill on April 9, 2011. An investigation conducted by the United States Fish and Wildlife Service and the Wisconsin Department of Natural Resources established that the eagles were poisoned accidentally after feeding on the remains of euthanized animals. Primich had sent the remains to the landfill on behalf of the Vilas County Humane Society.

On June 1, 2011, after weeks of intensive care, the eagles - three adults and four juveniles - all recovered from the euthanasia toxin and were successfully released back to the wild at Antigo, Wis., by Marge Gibson and her staff at the Raptor Education Group. Thus, the largest and most successful rescue of poisoned eagles came to a dramatic and happy completion.

Given the serious, accidental. poisoning of eagles, the Vaudreuil decided that an appropriate resolution of this case was for Primich to complete one hour of community outreach per month for 12 months at county humane societies, addressing the secondary mortality effects of using euthanasia drugs. Primich has now successfully completed this agreement, and there will be no criminal charges filed.

Learn more about the secondary poisoning effects associated with euthanasia chemicals: http://www.fws.gov/mountain-prairie/poison.pdf.

Final Habitat Conservation Plan and Environmental Impact Statement Released for Ohio's Buckeye Wind Farm

By Georgia Parham External Affairs

The Service has released the final habitat conservation plan developed by Buckeye $\overline{\text{LLC}}$ Wind \mathbf{for} their wind proposed power project in Champaign County, Ohio. Buckeye Wind developed the plan because the federally endangered Indiana bat occurs in the project area. The habitat conservation plan includes minimize to measures impacts and to ensure long-term conservation of Indiana bats through offsite mitigation, which will offset the incidental take from construction and operation of the facility.

Buckeve Wind's habitat conservation plan covers the company's activities that may result in take of Indiana bats during the life of the wind project. The plan addresses conservation needs for the Indiana bat including measures to avoid and minimize the potential for take: mitigation, including protecting enhancing existing and habitat; monitoring take through post-construction mortality studies; adaptive management; and funding of research to better understand Indiana bat and wind turbine interactions.

Buckeye Wind proposes construction and operation of a maximum of 100 wind turbines and associated facilities, for a period of 30 years, in eastern Champaign County, Ohio. While approximately 80,000 total acres are located within the Buckeve Wind Action Area, a relatively small portion of that land, about 130 acres, will be permanently occupied by project facilities. The project would include wind turbines, access roads, and other facilities.



Indiana bats, like those pictured in this cluster, are the focus of the Buckeye Wind Habitat Conservation Plan. The Service recently released the final plan. Andy King, USFWS



Regional Director Tom Melius presents Daniel Kumlin with an Employee Excellence award for Safety during the Motorboat Operator Certification Course. USFWS

Endangered Mussels Gain Ground in Twin Cities Stretch Of Mississippi River

By Phil Delphey Twin Cities Ecological Services Field Office

The stretch of the Mississippi River that winds through Minnesota's Twin Cities is now home to four federally endangered mussel species. This reach of the river wasn't always a suitable place for these animals.

In the early 20th Century, the river was grossly polluted, with mats of sewage sludge floating on a river that reeked of hydrogen sulfide gas during the summer. The Minneapolis-St. Paul area relied on the river to physically flush away human and industrial waste. This once pristine reach of the river, with ravines and the glorious St. Anthony Falls, had become a sewage canal.

The river's water quality had improved greatly by 2000, thanks to improvements in wastewater treatment. Unfortunately, immense numbers of invasive zebra mussels (*Dreissena polymorpha*) had begun to smother large, native freshwater mussel beds

downstream -- beds too far downstream to have been ravaged by Twin Cities' pollution. Recognizing the impending crisis to the federally endangered Higgins eye pearlymussel (Lampsilis higginsii) and other imperiled mussels, biologists began removing adults from affected beds.

The reach of the Mississippi River through the Twin Cities is upstream of the areas infested by zebra mussels and became a refugia for native mussels. Agency biologists formed the Mussel Coordination Team, and began translocating adult mussels to this and other river reaches. Pooling their skills, knowledge, and energy, the team also investigated mussel

propagation techniques that were used over 100 years ago at a state hatchery on the Mississippi River in eastern Iowa.

As a result, five Higgins eye were successfully bred in captivity and then released in 2004. In the following years over 11,000 more juvenile Higgins eye were released, and there is evidence that the original transplants have reproduced. The density and diversity of mussels in the stretch of river that runs through Hidden Falls Park within the Twin Cities metro area is doing so well that it now meets the Service's criteria as a primary habitat area of the utmost importance to Higgins eye recovery.



Members of the interagency mussel team prepare to release winged maple, Higgins eye and snuffbox mussels at Hidden Falls Park on the Mississippi River. Phil Delphey, USFWS



Zebra mussels. Randolph Croft

Additionally, the team reintroduced small a number of endangered winged mapleleaf mussels (Quadrula fragosa), in 2012. These winged mapleleaf represent the return of an endangered species had been absent from the Mississippi River for a century. The Minnesota Department of Natural Resources has also reintroduced the federally endangered snuffbox (Epioblasma triquetra) and other state-listed species into the river.

Although buoyed by success so far, the future is not without threats. Zebra mussels have been carried by boaters to reaches of the Mississippi River watershed that are upstream of the Twin Cities, and budget restrictions have also cut into propagation activities. The job now is to protect the mussels from growing threats and to continue to find ways to increase the resiliency of these mussel species in light of an uncertain future.